Amendments to the Specification

[0016] The base substrate 200 is formed from a stack structure that includes a substrate 202, a luminescent layer 204, a passivation layer 206 and connecting pads 208. Conductive bumps 118 connect the connecting pads 116 of the light-emitting unit 100 to the connecting pads 208 of the base substrate 200. Upon the application of a voltage bias between the connecting pads 208 of the base substrate 200, the light-emitting unit ~~200~~ 100 emits a first light radiation. In an embodiment, the first light radiation can encompass a wavelength range of blue color. Stimulated by the first light radiation, the luminescent layer 204 of the base substrate 200 emits a second light radiation different from the first light radiation. In an embodiment, the second light radiation can encompass a wavelength range of yellow color. The combination of the first and second light radiations results in a perception by the viewer of a specific light color, i.e. white light emission, from the light-emitting device.

[0017] Many variations of the foregoing implementation can be envisaged. In FIG. 2B, the base substrate 200 can additionally include a reflective layer 210 placed between the substrate 202 and the luminescent layer 204. The reflective layer 210 can act to reflect light towards the viewer side. In the example of FIG. 2C, the substrate 202 can be omitted. Though not detailed herein, it is understood that other variant embodiments with respect to the structure of the light-emitting unit 100 can be further envisaged in accordance with the inventive features described herein.

[0028] In a variant embodiment, the luminescent layer 404 can be made of a material ~~bled~~ blend including a phosphor powder and a passivation material such as benzocyclobutene (BCB), an epoxy-based negative resist or the like. The mixture including the passivation material and

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the phosphor powder can be spin-coated in liquid form on the substrate 402. A heating process then is performed to solidify and form the luminescent layer 404. Notwithstanding the foregoing specific examples, it is understood that many other material associations can be suitable to form the luminescent layer.